

CONTROL OVER SEX



H. S. GAMBERS

BY THE SAME AUTHOR

1. Kama Sutra of Vatsyayana	4	0
2. Ananga Ranga or 'The Stage of Love'	4	0
3. The Sex Organs (Illustrated)	2	8
4. Ideal Marriage	2	0
5. Cabala of Balzac	2	0
6. Ratishastra	2	0
7. Essays on Health	1	8
8. Control over Birth	0	12
9. Control over Sex	0	12
10. Fasting for Health	0	12
11. Miracles of Milk	0	12
12. Menstrual Disorders	0	12
13. Sterility. Its causes and treatment	0	10
14. Vitamins and Health	0	8
15. How to Build up Virility	0	8
16. Self-Pollution. How to overcome it	0	8
17. Night-pollutions and their treatment	0	8
18. Indigenous Aphrodisiacs	0	6
19. Painless Childbirth	0	6
20. Sexual Research	0	6
21. Yoga Exercises for Seminal Disorders	0	6
22. Indigestion	0	6
23. Constipation and its Treatment	0	6
24. Away with Colds	0	6
25. Surya Namaskaras	0	6
26. The grape cure	0	6
27. Food and Health Value of Potatoes	0	6
28. Mind of Woman	0	4
29. The Choice of Food	0	4
30. Onions for Health	0	4
31. Away with Headaches	0	4
32. Short-sightedness	0	4

BRIJMOHAN & Co., AMRITSAR.

All Rights Reserved.

CONTROL OVER SEX

BY

PROF. H. S. GAMBERS

AUTHOR OF

The Sex Organs ; Kamasutra of Vatsyayana ;
Painless Childbirth ; Control Over Birth ;
The Hidden Side of Sexual Science ;
Night Pollutions ; Self Pollution ;
Sterility ; Venereal diseases ;
Exercises of the Eye ;
Vitamins and Health ;
Yoga Exercises ;
etc, etc.

3rd EDITION

AMRITSAR

Brijmohan & Co., Publishers

1933.

ROJA MUTHIAH
47, HOSPITAL STREET
KOTTAIYUR-623 106
P. M. DIST-INDIA

PRINTED AT
The Grover Printing Press,
AMRITSAR.

Preface.

To control the sex of the coming babe has always been one of the many yearning ambitions of mankind. This is evidently due to the fact that a reasonable balance of the two sexes, the desire for which is very deep-rooted in man, is not met with in many homes. While one couple get only male children, there is a preponderance of females in the other. Either state is unsatisfactory and undesirable.

By far the great majority of people, primitive as well as civilised, give preference to male children and will spare no pains to have their wish fulfilled. The primitive people hail with joy and exultation the birth of every male issue while in monarchical countries it has been the custom to announce the birth of a prince by a salute of 101 guns and that of a princess by 35 guns only. This preference for male children is one reason why the question of sex-determination has occupied the human mind from times immemorial.

Most people, even the educated and otherwise intelligent, consider sex determination to be something beyond the control of man. "It is purely a matter of chance" they say, "Like heads or tails when you toss a coin in the air." Such statements issue only from weak, unperservering and unscientific minds. It is true that, so far, we do not know *one certain rule* of governing the sex of offspring or, in other words, there is no theory that gives cent per cent results, but this is no reason why we should not follow those methods which guarantee more than eighty per cent results or why we should not make earnest endeavours to find out new rules. There was a time when flying through air or travelling under the sea were deemed impossible but persistent scientific research has made them possible. Taking into consideration the rapid advances we are making in the realm of science, it is not too much to hope that some day in the near future we shall be in possession of an exact and sure method of sex control.

In this book I have given a brief survey

of different theories for sex-determination that have been advanced from time to time or handed down from generation to generation and finally chalked out a single working rule for establishing the sex of the future child according to one's wishes. May it help those to whom the sex of their next issue is an all-important question !

In order that their efforts to govern the sex of their future offspring be crowned with success, the readers are requested to follow the one working rule, given in the last few pages of this book, in all its items. It is sincere and exact adherence to the theories that can give results and not haphazard action.

The readers are further requested to send me a timely report of the success or failure of the method in their case, so that I may know whether the mass of evidence goes in its favour or otherwise.

H. S. GAMBERS.

Control Over Sex

CHAPTER I.

The Process of Fertilisation.

I would not open the discussion of the present subject with this chapter had I not known definitely that there is a fair percentage of educated people, even in these days of civilisation and culture, who are ignorant of the process of reproduction in the human species. Let all those who consider this chapter too elementary for them skip on to the next.

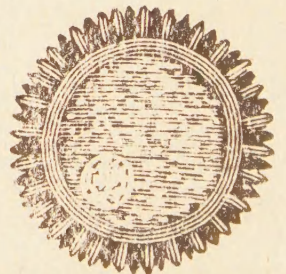
Life can only spring from the union of two forces, elements or germs ; in the case of human beings the two elements are the spermatozoon and the ovum.

The spermatozoon is derived from the male. It originates in the testes and escapes to the exterior through the medium of the vital fluid. The semen discharged by man on a single occasion contains millions of these life-giving elements. The spermatozoon is too small to be seen with the naked eye; but if a drop of semen be examined under a microscope it will reveal the presence of innumerable sperms actively moving in the fluid.



Spermatozoon

The ovum has its origin in the ovaries of the woman. It is supposed that one ovum is shed by one of the two ovaries every month. This is picked up by the fallopian tubes and passed on to the interior of the womb or uterus.

Unimpreg-
nated ovum.

Fertilisation is the incorporation of the male elements with the ovum in the

womb. This occurs when man and woman meet together in sexual congress.

In the woman, the discharge of the ovum by the ovaries and its subsequent arrival in the uterus is indicated by a periodic discharge of the blood from the female genitals known as the menstrual flow. The flow commences when the woman reaches puberty and recurs at intervals of twenty-eight days during the fertile years of the woman. Absence of the menstrual flow in a woman of normal health and strength, and who has previously been regular, is indicative of her having conceived.

It is considered that after its arrival in the womb, the ovum waits for the sperms for its impregnation for sixteen days and if it is not fertilised during this period, it is rejected by the uterus as a dead and useless element. This means that conception can normally occur during the sixteen days after the commencement of menstruation. It can also occur during two or three days before the onset of the period sickness. These facts are of considerable importance in the discussion of our theories of sex control

See Figure on the opposite page.

V, Vagina. The tube that encases the male organ in sexual congress.

M, Mouth of uterus.

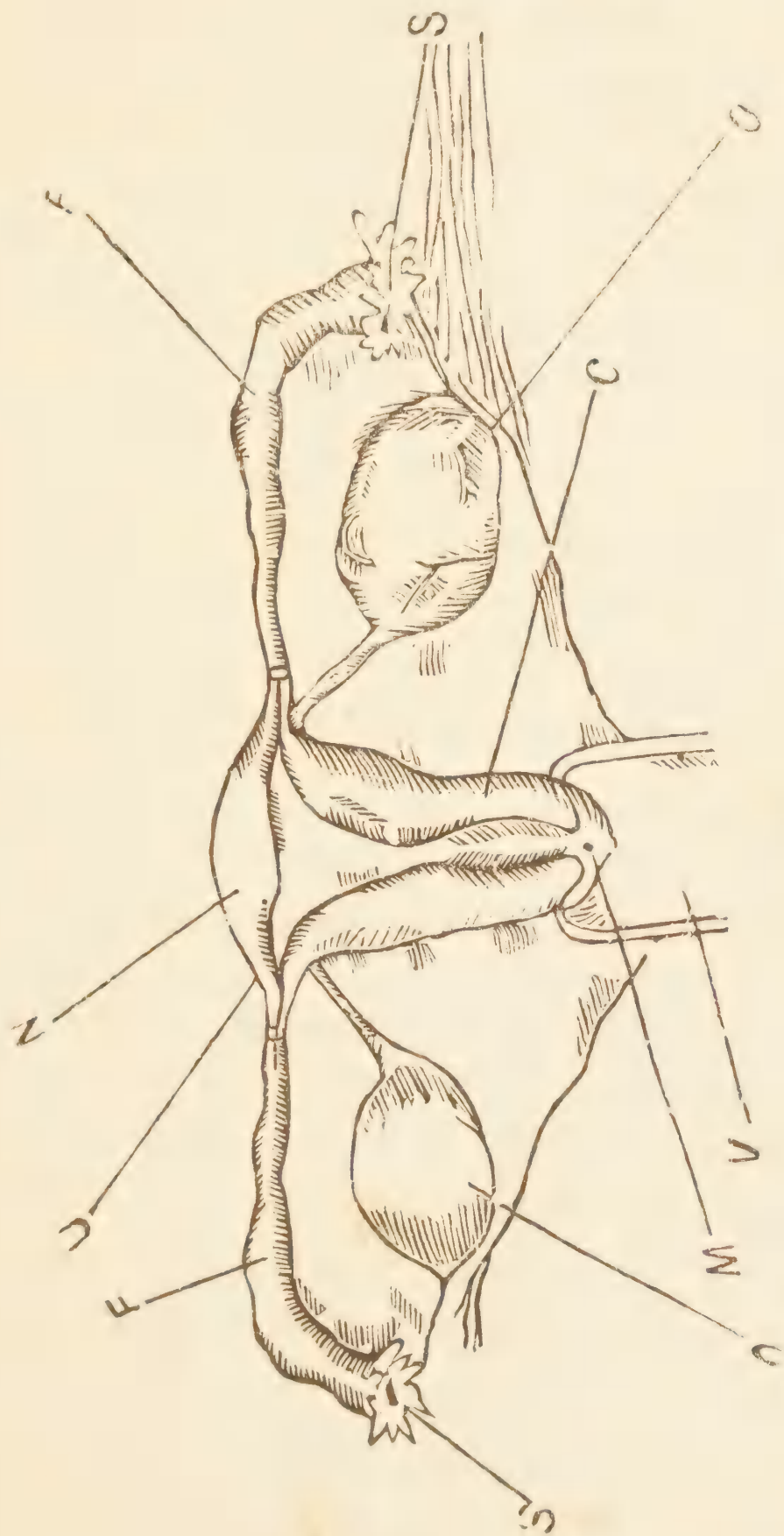
C, Cervix or neck of the uterus.

U, Uterus or womb. In its cavity impregnation occurs and the embryo develops.

O, O, The two ovaries. Notice that the right one is the bigger of the two.

F, F, The two Fallopian tubes. Their function is to convey the ova to the interior of the uterus.

S, S, The claw-like openings of the Fallopian tubes whose function is to catch hold of the ova when they are shed by the ovaries.



POSTERIOR VIEW OF THE INTERNAL REPRODUCTIVE MACHINERY OF WOMAN

CHAPTER II.

The Need for a Balanced Family.

The need for a balanced family is so acutely recognised in every home that it is scarcely desirable to write anything on the subject.

In the first place, an approximately equal number of boys and girls are required for the perpetuation of the human race. The very foundation of the sacred institution of marriage rests upon this equilibrium.

A large increase of one sex over the other leads to prostitution and unnatural and illegal means of sex gratification.

A large surplus of girls lowers the social status of women and places them at an economic disadvantage. This can be witnessed in England and America where the services of a lady-typist, a lady teacher or a factory girl can be had cheaper than those of the other sex.

A son can safeguard the interest of his parents better than any daughter. He

can stand by their side in their helpless old age and help them physically and financially.

A daughter is the true companion of her mother and no son can ever fill up her place. She helps her mother a lot in managing the house and in bringing up the younger family. She is an ideal nurse when attending her parents in their sickness.

But this is not all. When boys and girls of about the same age are brought up together both of them are equipped for better citizenship. A girl is an embodiment of gentleness, love, piety, purity and humility, and through her chastening influence, the boy learns to get better hold of his rough, unruly, violent and often barbaric nature. A boy is an embodiment of strength, courage, endurance, hardiness and fearlessness, and when a sister frequently witnesses these masculine qualities of her brother coming into play, it helps her to shake off her shyness, timidity, squeamishness and readiness to yield. Apart from this, the bringing up of boys

and girls together from early childhood goes a great way in normalising their sex life. The curiosity of either party to know of the sex of the other is satisfied in early years and this eliminates the growth of morbid desires in their after life. Writes Bernarr Macfadden in this connection :

“ One of the strongest arguments for a reasonable balance of the sexes in the average household is its effect in normalizing the sex life of children. When boys and girls are brought up together in the relatively unsexed intimacy and freedom of early childhood, particularly in families where the parents have a sane attitude toward nakedness and a right detestation of prudery and its concealments, the probability of unhealthy repressions is greatly lessened. Girls who all their lives have been used to companionship with brothers take the male of the species and his sex for granted, and they are capable of meeting men in later life without the self-consciousness and the unhealthy curiosity and devastating ignorance so common among girls

who have been associated exclusively with their own sex in early childhood. I need not dwell on this in detail. If you want evidence inquire into the disciplinary problems that confront the teachers in every "exclusive" school for girls.

The same thing is true among boys. The boy brought up without a sister has greater difficulty in finding himself in his relations with women later, and in acquiring a wholesome attitude toward them,...and is far more likely to turn to sexual excesses. The problem is difficult enough at best; and it is unfortunate that it should ever be made needlessly hard simply because of a lopsided adjustment of the sex ratio in many families.

Ideally, boys and girls should come alternately or nearly so; and brothers and sisters should be near enough of an age to pass through childhood and adolescence together. I think the fact that this is not the way the thing works out in thousands of families is a source of many a tragedy. I

believe that if there were available to the American people some simple, easily understood, and easily practised means of sex determination, which could be depended upon to work, either invariably or at least in all but a very small percentage of cases, sex determination would become a very valuable social corrective. Moreover I am sure that, regardless of its wider social consequences, it would bring happiness or greater happiness into thousands of homes where little or none now exists.

Sex determination, if it could be effectively and intelligently applied in connection with Birth Control, would have certain extremely important sociological results, which would be felt not merely by individual families but by society at large."



CHAPTER III.

Sex Determination.

On account of the preference which most people give to the male child, the question of sex determination has always exercised a peculiar attraction for the human mind. Scientists, philosophers and medical men have all exerted to find out a way to govern the sex of the coming child. Every layman and every midwife has his of her own theory possibly based upon some folklore handed down from generation to generation.

Among the ancient philosophers who handled and dwelt upon this question were Hippocrates, Aristotle, Plutarch and Galen.

The number of theories that have so far been advanced on the subject of sex determination is difficult to calculate. Over a century ago, Drelin Court collected the whole data and had the persevearance of enumerating some five hundred theories of sex determination. Not being satisfied with

this long list, he finally added his own theory to it and handed down the massive list to the next generation who augmented it still further.

Practically all the experiments and most of the observations relating to this question have been conducted on domestic animals...dogs, pigs, cows, rabbits, etc. Whether the phenomena, that hold in the case of animals, hold equally well in the case of men is a question that has not been fully settled so far.

In the investigation of the phenomenon of sex determination, animals were selected for experimental work in view of the ease with which they could be controlled and their bodies subjected to dissection, should necessity for it ever arise.

In studying the animal life, almost every internal and external factor that could, in any way, influence sex was taken into consideration. The following is a gist, given by Fielding, of the conclusions arrived at by Wilkens as a result of

his investigations of the births of 30,000 domestic animals :

1. “ *Locality* (soil and climate) has an influence upon the sexual ratio and upon the determination of sex in domestic animals, but this influence is probably indirect only, being exerted through the intermediation of the nutrition of the embryo *in utero*.

2. *The season* in which the domestic animal is conceived affects the sex ; the hot season favours the production of males, the cold season that of females. In the hot season, in general, the appetite and nutrition of domestic animals diminish, whereas in the cold weather these increase.

3. Regarding the *male progenitor*, neither his age, nor his sexual energy, nor the demand upon that energy, nor the age of the semen has any influence upon the sexual ratio or the determination of the sex of the offspring.

4. The age of the *female progenitor* influences the sexual ratio and the determi-

nation of the sex of the offspring in this way : that in general, primiparæ (mothers giving birth to first offspring) and young mothers conceive a large number of female offspring. This influence of age may be referred to the fact that in general young mothers nourish their offspring *in utero* better than old mothers.

5. The *parturition of the young in utero* influences the determination of sex, speaking generally, in the following way, that better nutrition favours the determination of the femal sex, worse nutrition favours the determination of the male sex.

6. In addition to the influence of nutrition of the unborn young upon the determination of sex, *other influences*, whose nature still remains *obscure* must also co-operate, because one and the same progenitor in similar nutritive conditions does not always procreate offspring of the same sex.

7. Owing to the operation of these *unknown influences*, prediction of the sex of

the offspring, and voluntary determination of the sex of the offspring, remain impossible. All we can say is that there is some probability that young and well-nourished mothers will procreate a comparatively larger number of female offspring, while elderly and ill-nourished mothers will procreate a comparatively larger number of male offspring. "

This excess of male births over the females seems to be one of the invariable natural laws. Rumley Dawson has tried to explain it in a certain way as will be seen in the coming pages.

One significant fact to note in connection with the phenomenon of sex determination is that, at all times and in every country, race and clime, there have been more male births than female ones. Of course the death rate of male children is much greater than that of the female ones, so that, in countries like England and America, more females survive than the males, in the long run.

The ratio between male and female births varies, to some extent, in different countries. On an average, it is 105 males to every 100 females. Among the Jews, however, the ratio is 115 to 100.

The whole mass of theories of sex-determination having been well sifted, only those theories have been discussed in this book which have received support from scientific men or which have yielded satisfactory results. These theories cover all the factors that can influence sex in any way...The time of sexual congress, the position of the parties, the intensity of desire on either side, the age and physical fitness of husband and wife, food and nourishment, the lunar influence, etc. etc. There is good ground for believing that the combination of the few select theories, as advised in the last chapter, will invariably yield the desired result,

CHAPTER IV.

Sex Determination (*Contd.*)

THEORY THE FIRST

Influence of the Testes.

It is a very ancient belief that the sperms derived from the male govern the sex of the future child and that the ovum has nothing to do with it. Since the sperms originate in the testicles, it was supposed that these sex glands controlled the human sex in one way or the other.

The testes are two in number—a right and a left one. From times immemorial the right has been associated with the male sex and the left with the female sex. It is further supposed that, in sexual intercourse, the discharge of the vital fluid on any single occasion takes place only from one testicle which appreciably rises up at the time of emission. That the latter fact is true can be ascertained by any one of us but whether the vital fluid is actually derived from only one testicle in a single dis-

charge has never been demonstrated. However the testicular theory of sex control runs as follows :—

“ If, in sexual congress, the discharge occurs from the right testicle and conception takes place during that embrace, the result will be a female issue. ”

The promulgator of this theory, an American, supported it by giving certain records of his experiments that he conducted on certain animals. He took a pack of dogs and surgically removed the right testicle of one half and the left testicle of the other half. He kept the two sets, differently operated, in separate high-walled compounds and allowed them to mix with bitches in heat. The females conceived and in time brought forth pups when it was found that the bitches which had associated with dogs bereft of the left testicle had only male pups while the other batch had only female pups. The same experiment, according to his version, was successfully conducted on pigs, rabbits, goats, etc.

The promulgator of this theory advised the people to take advantage of these facts and, in order to control the sex of their progeny, allow the discharge of the desired testicle alone to escape at the time of sexual embrace. A vessel, known as *vas deferens*, springs up from either testicle and these vessels convey the vital fluid from the testes to the exterior. If one of the vessels be tightly bandaged with tape with a view to obstruct the passage of the vital fluid in that vessel, the seminal fluid of the other testicle alone would escape to the exterior and impregnate the ovum with the desired sex.

At one time, this theory was claiming wide acceptance but then a man was found who had only one testicle but who had produced children of both sexes. The theory lost its charm there and then.

THEORY THE SECOND

The Superior Opposite.

This theory was advanced only recently, was accepted by many of the leading scientists and thinkers of the day and, even up to the present day, claims very wide acceptance. It has been treated at length by Samul H. Terry in his book "The Secret of Sex." The Theory has been expressed as follows :

"Organisms subject to the highest tension of sexual passion at the moment of the procreative act, produce offsprings of sex opposite to their own."

In simple words the theory means that if during the sexual union which results in impregnation of the woman, the woman is more excited sexually, the result will be a male child and if the man is at a higher pitch of sexual excitement, the result will be a girl.

Terry supports this theory by advancing the following reasons in its favour :

(a) Robust, healthy, and apparently lusty wives more frequently have male than female children, particularly so when their husbands are of medium or inferior vigor, and reversely :

(b) Delicate, weak women, who indicate from their appearance but little sexual ardor, more frequently have female children, especially when their husbands show indications of greater sexual vigor.

(c) Women who have these characteristics in a medium degree, which may fairly represent the great majority of wives, and whose husbands are also of fair average vigor, if they continue having children regularly about every two years, will have more girls than boys.

(d) Wives who have been brought up religiously, and when young girls become devoted church-members, have usually a larger proportion of girls than boys. This has been as yet mainly noticed in village communities.

(e) The wives of the farming population

have more boys than girls, and reversely :

(*f*) The wives in communities, where their vitality is lowered, either by luxurious habits or excessive labour, give birth to more girls than boys.

(*g*) Illegitimate children born throughout the country are in very large proportion boys, as much, or more, than 3 to 1.

(*h*) Illegitimate children born in cities, though oftener boys than girls, are not so near the extent they are in the country.

(*i*) The children of a woman 18 to 22, who is married to a man of 35 to 40, are in larger proportion girls.

(*j*) The children of a woman of 25 to 35, whose husband is 5 to 10 years younger than she is, will have a larger proportion of boys.

(*k*) In a family of brothers and sisters, if the sister when married have a preponderance of girls, the brothers when married will have a preponderance of boys, and reversely.

(*l*) If the sister when married have

mostly boys, the brothers when married will have mostly girls.

(*m*) The begetting of girls requires so much of sexual vigor in the father, that a saying has become common among the rural population, "that any boy can beget a boy, but it takes a man to beget a girl."

Terry also quotes numerous individual instances in support of his theory of which the three, given in the following, are typical ones :

1. An acquaintance in Pennsylvania, whose wife had borne him several children, mostly girls, was elected a member of the House of representatives. He spent the winter in Harrisburg ; this being before the time when railroads ran to every section of the States, travel home was to him both tedious and expensive. In exactly nine months after his return home in the spring his wife had a son. After spending the second winter in Harrisburg he was elected to Congress, and third winter was spent in Washington. Again promptly in nine

months after his return home in the spring his wife had another boy. The two events were thus so peculiarly marked that among his intimate friends the boys were dubbed the "Representative" and the "Congressman."

2. A neighbour of the author, a milkman, had a herd of some twenty or more milch-cows, for whose service he kept a bull, and somewhat, also, to serve neighbours' cows. He said it was a very unusual thing for a heifer calf to be born among his herd, sometimes not one the whole season; while among the cows of the neighbours served by the same bull, the calves were no more frequently male than female.

3. Two young sows of the same litter belonging to the author—as near alike as two peas—being in heat, were driven one morning about half a mile to a neighbouring farm where a boar was kept. One of them was served and driven home. But as the boar showed no inclination for another immediate union, the other sow was left on the place with him to be served and

sent home later. The litter of the first one served was, six female, two male; and the second one, seven male, two female.

Obs 1. This case shows to the reader how a tendency to have girls born in a family may be overcome in a natural and proper way. That is by a total separation of the husband from the wife's bed for a time, longer or shorter, to enable her to fully recuperate her strength, and to get up a strong, healthy, natural desire for a reunion with her husband. In this case, not only was the separation a fitting one for this purpose, but the coming together was under favourable circumstances for the wife's conception of a son. The separation had been long enough to kindle in the wife a strong desire for the embrace of her husband. Ordinarily this would have been proportionally stronger, and the chance of a male conception less probable; but this was away back, before the time when railroads ran to every little town, and the husband reached home after some three days' travel by stage-coach and wagon.

It is not necessary to suppose that he had during the separation from his wife illegitimately satisfied his desires, and was, therefore, less sexually excitable than his wife. Fatigued by his long ride, he would naturally feel more like resting and sleeping on his retirement to bed, than indulging very effectively his wife's ardent desire,—a condition on both sides, according to the hypothesis, for the conception of male offspring.

Obs. 2. These facts all accord with the hypothesis. The milkman was eminently shrewd and practical in the management of his herd. It was always composed of cows in their prime ; they were kept in the best possible condition of flesh, and with very little stall-feeding were always fit for the butcher. He did not think it profitable to raise the few heifer calves his herd produced, but as any of his cows got past their prime they were sold off to the butcher, and their place supplied with others younger but still at their maturity, these giving the best results in the production of milk. Consequently his cows were always

at the best and the most vigorous period of their existence, neither very young nor very old. For the same economic reason he raised every year or' two a bull-calf, which, as soon as old enough, served his herd of cows, but which so soon as he had fairly his growth, and while still young was castrated and sold to the butcher, his place being supplied by a growing younger one from time to time. The bull did not run with the cow, but when one of them was in heat she was turned into the small enclosure where he pastured, and, as he had so many cows to serve, only a single intercourse was allowed between them. The conditions were such as to give each cow separately a much higher degree of sexual excitement at the intercourse than the bull possessed. In the first place, his ardour was often weak, for having so large a herd to serve ; and in the second place, there was, so to say, no preparat on for excitation of the bull prio to the connection with each cow, as there would have been had he run with the herd ; while with each cow there was somewhat of this excitation from other cows of the

herd, before her state of heat would be noticed by the attendants. Add to this the condition of the bull's youth and more tender muscles, as compared with the run of the cows, and the circumstances all were favourable to the engendering of male calves. When the neighbours' cows were sent in to the bull the conditions were often quite different. These were often in a lower condition of keep, had been led or driven such distances and under such circumstances, as sometimes to greatly fatigue them, and were often young heifers, so that, at the connection of the bull with any one, he was likely to be in as high a state of sexual excitement as the cow was, and there was an equal chance of as many female as male calves resulting from the intercourse with these neighbours' cows.

Obs. 3. This case is explainable on the hypothesis as follows: The sows in being driven to the boar by a way somewhat tortuous, with branchings-off from the road, required some racing to keep them in the right track, from the natural contrariness

of the animal that always wants to go the way different from that the driver wishes. So they arrived at the home of the boar somewhat tired out, and without opportunity to rest an immediate union was had between one of them and the boar while he was fresh and not fatigued. According to the hypothesis, under these conditions female pigs would be more likely conceived all other things being equal. The second sow being left on the premises till later, had ample time to rest and regain all her natural strength. The later union between her and the boar while he had yet scarcely recovered strength after his previous encounter, naturally gave this sow the chance to be in a higher degree of sexual excitement than he, resulting in the conception of a larger proportion of male pigs in the litter."

The method of obtaining male offspring according to this theory has been chalked out by the writer as follows :

"The first and great rule is never to allow of the sexual embrace except at the

wife's earnest and ardent desire. This must not be a desire merely to please her husband, which is too often the impulse, but one arising from a real craving for the gratification of her passion. Should there be a remaining feeling of unsatisfied desire on her part after the consummation of the act, it would be a favourable indication that it was a male conception, if any occurred at the time, and this remaining desire should not be quenched by a repetition of the act.

As such intercourse usually takes place at night, there should be also some consideration of the best time in the night for it. This must depend on the daily occupation of the wife. If this is such during the latter part of the day and evening as to weary her as the care of a fretful child, and she retires to bed fatigued, nervous, and unstrung, the early night is unfavourable for the conception of male offspring, even though by thinking upon the subject she may stimulate her desires to such an extent as to wish their gratification. Especially will this early hour of the night be unfavourable for

male conceptions if the husband, as often happens, has ceased his daily labours and cares at the close of day, and had time for rest and recuperation before bedtime. Under such circumstances the sexual connection should be postponed till toward the morning hour, when the wife has been strengthened and refreshed by sleep. The case is different when the wife's employment late in the day and evening has been such that she retires to the marital couch not fatigued while the husband's labours at the same period have been such as to induce a sense of fatigue. Then the hour of retiring would be appropriate for their connection, provided of course, the wife first desired it. There is also a period in the month that the wife will do well to consider. As is known by most people, the monthly menstruation of woman is the same in general character and purpose as the period of heat in the females of the brutes. It is, however, so much more intense that the discharge is sanguinous, and the desire created more lasting. In brutes the desire is very transient, the female

admitting the male, usually, only during the periodic flow of heat; while in the woman this desire often lasts the whole month through. There seems in this stronger passion of the woman a special providence to continue the existence of the race. Did she possess only the transitory desire of the brute female, her intelligence would induce her to calmly bear this fleeting demand of nature knowing the consequences that follow its gratification, and increase of the race would consequently languish. But as this passion in a healthy woman may last all the month through, there is a continuous demand, more or less great, for its gratification by marriage. Especially is this in the young woman just come to maturity and at a marriageable age, when her desires, if not at their strongest, are at least more difficult to repress.

While the sexual desire incident to and following menstruation is usual spoken of as continuing through the month, it is not universally so. The writer has been told of wives who feel this passion only during

the menstrual flow, and in whom it is difficult to excite it a week later. Of course with such passionless women it is difficult to conceive male offspring. Their only chance would be with husbands whose desires are as feeble as their own; and then the probability of the production of strong, vigorous children of either sex would be very limited.

It was one of the author's secondary theories, founded on his own personal experience, that the nearer a conception occurred to the period of menstruation the greater would be the female's sexual excitement, and, therefore, the greater probability of male offspring, and that if conception was delayed a few days after menstruation the offspring would be female. But on fuller investigation this as a universal law, had to be abandoned. There are well-authenticated cases in medical works where wives have conceived sons even twenty or more days after menstruation. There is, too, the case of the religious Jews, among whom a fair proportion of boys is born, whose

sacerdotal laws forbid the intercourse of the husband and wife till full eleven days have passed after menstruation. There is also the undoubted fact found in the management of bees, that if the queen is kept from the male for some days after she is willing to accept him, her progeny will be largely males.

As a fact, women vary in the continuance of this desire—some a few days only from and after menstruation, others two weeks, and still others through the full month. That a great many lose this ardency early in the month, is shown by the current belief that they will not become pregnant by an intercourse with their husbands after two full weeks from the menstrual period.

The conclusion from all this is, that every wife desiring male offspring should carefully observe her disposition in this respect for a month or two, and notice at about what period after menstruation her desires are most intense, and thus be prepared to select that period only.

Among the causes that tend to the conception of daughters none are more influential than too frequent sexual intercourse, particularly when the intercourse is at the solicitation of the husband, and the wife has no desire, except as momentarily excited by the caresses of the husband.

The husband should remember that his wife's periods of high sexual desire are immutably fixed by her menstruation at a month or about that apart. While his are only about a week apart—that is, if his sexual desire is completely extinguished by a full gratification—a natural return of desire will occur inside of a week at furthest. It is true an artificial desire can be stimulated on both sides by the imagination at intermediate times. But it is this inferior condition of desire that is especially to be deprecated by the wife as favouring the conception of girls."

THEORY THE THIRD

Cross Heredity of Sex.

This theory, which was advanced by one M. Thury of France, upholds that the ovum is male and the spermatozoon female, that the ovum goes on ripening in the uterus for a fortnight after its arrival there; that the incorporation of sperms with a perfectly ripe ovum results in a male issue and reversely. The details of working out this theory will be given presently.

One weighty evidence in support of this theory comes from Bernarr Macfadden—the renowned Physical Culturist of America. He had the ill-luck or good luck of having seven daughters in succession and badly stood in need of determining the sex of his next child. How he succeeded in this is described in his own words in the following :

“Hitherto my wife and I had left the outcome to chance so far as sex determination was concerned, and as I have said, had gotten only daughters. Evidently, then,

that method wasn't the right one. And now the situation being what it was, and our tendency to produce girls having apparently become a fixed habit, there seemed nothing for it but to turn to that appalling array of sex determination theories, near-theories, and wives' superstitions which are scattered through scientific literature by hundreds, then make a choice from among these and take another chance.

It was very discouraging, for we were in no mood to take a chance. Moreover, the prospect gave small ground for confidence. Most of the alleged theories we examined were nothing more than the folk-lore of the race. They seemed to have about as much scientific basis as the notion that the moon is made of green cheese and that there is a man in it.

Still, when all these old traditions and fables had been discounted and thrown out as worthless, there remained a handful which had had more or less support from scientific men, and which, therefore, seemed to permit respectful scrutiny. However, nearly all of them had more evidence

against them than for them. And yet they were all suggestive ; and many of them contained gleaming hints and traces of the truth which a wise man, when he sees them, hoards as a placer miner hoards the gleaming particles of gold, till he has enough of such scraps wherewith to construct a notion of his own.

I tried to do just that ; with the result that I am able to put down a theory made up of several old ideas combined, I hope, into something new and reasonably valid.

But I did not leap to any final conclusions immediately. Long before I had got around to that I had chosen at a venture what seemed to me the most plausible of all the theories which had at that time come to my attention, and had put it into practice. Apparently as a result of this method my wife in due time gave birth to our first boy, Byron.

Thury Theory of Sex Control.

The theory on which we acted in this case was, I believe, first suggested in 1863 by

M. Thury, veterinary surgeon in Southern France, who was interested in the idea of breeding animals for sex. Thury wrote about it in German under the terrific title "Ueber das Gesetz der Erzeugung der Geschlechter." His book was published at Leipsic, and the news of it spread, through various popular and scientific periodicals, to this country, where a part of the scientific world has given it respectful consideration, while another part, made up notably of the conservative majority of the medical profession, has ridiculed it without taking much pains to find out from cases whether it works in a reasonable percentage of instances or not. I must add, regretfully, that many scientists who have tested out the theory on animals have gotten either contradictory or inconclusive results; and the consequence is that even those who think there is something in the Thury method give it only the most qualified and cautious support.

Thury suggested that the important factor in determining the sex of offspring of

animals is the time of conception relative to the rutting period, the inference being that a similar method of calculation would apply to the menstrual period of women. He maintained that when conception takes place soon after the end of the mother's menstrual period the result is usually a girl, and that the probability of a boy grows stronger in proportion to the lateness of the conception, and the *consequently greater ripeness* of the ovum. This involves what is known as the theory of the cross heredity of sex, which assumes that the ovum is male and the spermatozoon female. A perfectly ripe ovum is supposed to be stronger than the spermatozoon that fertilizes it, and therefore to produce a male: while a younger, less ripe ovum, being weaker, gives the female element of the spermatozoon the right of way. This theory became a matter of common knowledge in the United States, and was set forth with considerable particularity in works such as the old "Family Medicine Book" of Dr. Fowler.

The general statement of the theory was that if conception takes place within the first five days after menstruation, a girl results ; if from the sixth to about the eighth day, a girl or a boy ; and if from the eighth day on, a boy, taking the time from the eighth to the twelfth day as offering the best probability of a successful conception. Some upholders of the theory change this schedule a little, but in the main, they agree on its general features.

One man in the medical profession who has believed in this theory for many years and who has seen it work out successfully in thousands of cases, is David L. Reeder, M. D., of La Porte, Indiana, who some months after the birth of my son Byron contributed an article to *Physical Culture Magazine* which agreed with my own evaluation of the Thury method in every particular, and cited an abundant professional experience to prove it. Naturally, I was gratified to have my judgment so ably upheld.

The birth of our first son, Byron, did

not end our experience with the Thury method, however. Sorrow came to us, and bitter grief. This boy we had longed for and hoped for, and on whose young life so much of our happiness rested, died. Later, when the first pain of bereavement had passed, we thought the loss would hurt us less if another son should come in Byron's place. And so we ventured again, in an effort to control and direct Life in some measure at its source. The result was the same—a son. We named him Berwyn. Berwyn was followed with another son, Brewster, now a year old. Three boys in succession after seven girls in succession !”

Pleased with the success of Thury's Theory of sex determination in his own case and wishing to help those to whom the problem of determining the sex of their future children was as acute as it was to himself some years back, Macfadden published in the Physical Culture magazine an account of the Thury method relating the story of his own case in applying it. He urged upon his readers, who followed the method, to

report to him the success or failure of the theory in their own particular case so that statistics, in favour of and against the theory, may be collected. Most people had already heard or read of the theory and some had even applied it in their case and so Macfadden received letters from all parts of the world bearing upon the subject. The record of these, as given by him, as well as his comments upon it will not be without interest :—

“ After some months I finally compiled a record based on 199 conceptions in 33 families. The method apparently had worked out successfully in 180 of these conceptions and it apparently had failed in 19 of them. That gives a ratio of about $89\frac{1}{2}$ per cent of successes to about $10\frac{1}{2}$ per cent of failures. In addition, and not included in the list, there were 17 conceptions reported as being “in doubt” because the dates of the conceptions were not certainly known. Fifteen of these 17 cases, however, occurred in families where the theory had worked out successfully for other children whose con-

ception dates were known. It reasonably may be assumed, therefore, that had the dates of these 17 conceptions been known, the ratio of success and failure would have worked out on a basis of about 9 to 1, as in the 199 cases cited above. *In all but a few cases the theory, if it worked at all, worked right through, consistently, no matter how many children were born to a given family.*

On the face of it this record is suggestive. But it is no more than that. It would require not 199 conceptions but thousands, all properly authenticated, to give that ratio of 89.5 to 10.5 any standing as a scientific law. Quite likely further investigations would materially change these figures, either in support of the theory or against it. Nobody knows. I cannot too strongly urge upon my readers the desirability of caution and an absolutely open mind in dealing with these matters. At best we deal for the present in probabilities, not certainties; and we must be content if it can be shown that they are strong probabilities. I present the above figures for what they

are worth, and their value consists in the balance of probability which they seem to establish. It is worth testing out in the hope that it may point the way to further discoveries. ”

The theory that “ the spermatozoon is the precursor of female sex and an ovum of male sex ” has been upheld by other writers as well. In 1918, Mrs. David McConnel B. A., contributed a paper to the *Medical Press* supporting this theory and the paper was met with applause from most of the medical men. The following is, in brief, a gist of Mrs. McConnel’s theory :—

“ Through human embryology may be traced an evolution of method and of design, which carries the investigator, back to the primitive one-celled animal. This is the *Mother-cell* which was capable of reproduction spontaneously ; the later evolution of the use of two cells for fertilization was not for reproduction proper, but for activation of the mother cell, and for variation, which is brought in by the male. In the primitive mother cell when ready to repro-

duce there has been such a chemical and physiological gathering together of the elements necessary to life from the matrix or environment in which the cell lies, as would produce sufficient energy and material to make a double nucleus—the nucleus being the basis of organised life and inheritance. The cell then divides into two cells, separates, and grows as two individuals, and so on *ad infinitum*.

When the same condition is found in the human Mother-cell the ovum is ready to reproduce the producing cell again—namely the female, and if fertilized at this point a female is the result; if before or after that replete condition of the cell a male is the result; but, there is in the higher evolution than that of the primitive cell another method in reproduction—it is not spontaneous—it is not the Mother-cell nucleus which divides, because of sufficient energy in the nourishing quality of the cell, but the father nucleus in the sperm, a very minute structure, which enters the nourishing substance of the Mother-cell and ex-

pands in it until it reaches the size of the nucleus of the Mother-cell itself. The result is female, a complete return to the *condition* of the one-celled original primitive mother-cell when ready to divide—or rather to reproduce. So the father is pre-eminently the precursor of the girl who is like to him, or should be. This was demonstrated by the Frenchman Bonnet, many years ago. When he made experiments with secondary inheritances, he found that an early entrance of the sperm into the mother-cell produced the father's characteristics in the offspring. He was not then demonstrating the determination of sex but incidentally he helped to prove it.

Boys are formed by fertilization when the Mother-cell is not replete, either before or after that condition which produces the female—boys are therefore like their mothers. The mother's nucleus has not had the power to expand and impress its secondary characteristics...but this is as it should be. The mother-cell is conservative and maintains the features of the species...

the father's influence is for variation...so that the boy be like the Mother is a balancing quality. The girl is weighted with the actual organs for reproducing, but she inherits the father's qualities to pass on to her sons. It is not too sudden a variation, it has been weighed in the balance by two generations.

Boys and girls characteristics vary, according to how near to the line of demarcation of sex has been the accident of their conception. "

Possibly on the strength of Mr. Thury's theory, enunciated by him long before her time, Mrs. McConnel, in the same paper, presented her method of sex determination which is, in all essentials, the same as the Thury method. Writes she :—

" The ancients would have it that the moon had something to do with sex, and they were right in so far as this, that the mathematical relation of twenty-eight days could be applied to the periods of fertilization in the human species; twenty-eight days in a lunar month, and ten of these

twenty-eight days is needed for the formation and perfection of the child before it comes to birth. In the intelligent use of these twenty-eight days lies the whole biological history of the possibility of race making.

I have now studied the question much more from a point of view of race efficiency than from any other. It is first a question of liberty of conscience for women in regard to the laws of maternity, and of mutual responsibility between husband and wife in regard to their children. A woman with the requisite knowledge, and with reciprocity on the husband's part, can hold her health and the possibility of the health of her children in her own keeping under normal conditions; she and he can decide what their responsibilities shall be. This is what we may call responsible parenthood; it means the intelligent use of a law of nature laid down for us already.

It is possible to effect the character of coming sons and daughters as well as their physical well-being, by choosing a suitable

time for fertilization. German doctors have investigated along the line of the influence of certain experiments in producing feminine or masculine secondary traits, and there would seem to be no doubt that sons may be effeminate, and that daughters may be masculine by an accident of fertilization at a time when the mother cell is in a condition which might produce either sex. Physiological defects, in which one sex resembles other too nearly, may also be traced to the same cause.

There are times during the twenty-eight days when fertilization should not be allowed to take place, as the mother cell is in an unprepared condition and not in the position in which it is intended eventually to rest. Fertilization at this time is productive very often of physical defects in boys and of mental deficiency ; it is possible also that pregnancy may take place in the Fallopian tubes or in the ovary, necessitating operations.

There are two periods of fecundity in the twenty-eight days, before the menstrual

period, and following it, probably governed by the action of first, the right ovary, secondly, the left ovary. Autopsies on pregnant animals show embryos of both sexes in the two horns of the uterus ; while operations for tubal and ovarian pregnancies in the human subject show male in the right tube or ovary, this being the result of fertilization before the menstrual period, and at a time when the mother cell was immature and not in a sufficiently advanced position. A later fertilization of the same cell could have produced a normal pregnancy of either a male or female, the formula being : male, female ; the five days of the period ; female, male.

There is a time in the twenty-eight days which cannot be used at is may result in disease.

The instructions given below show by divisions of time the days when fertilization would be unpropitious ; days when daughters may result ; days when sons may result ; a resulting ground between the two because the result might be doubtful of

efficiency, and a certain number of days human relations can take place for the general health and happiness of those concerned without injury to children.

INSTRUCTIONS for married women for the use of the 28 days of a woman's month. Ten times 28 days is the time it takes to perfect a child.

RULES—Use no other than the days indicated for a proposed use on one of the charts.

1. Keep a calendar always. Put down the day of the next expected monthly—all girls and women should do that. There should be exactly 28 days between the appearance of the present monthly and that of the next one.

2. Keep apart 10 days before the monthly is due. This avoids certain diseases in women and children.

3. Do not use the 5 days of the period itself *ever* and *count* it out as 5 days even if it does not last so long.

4. **To obtain girls** use only 1st and 2nd days after the 5 days of the period, and no

others at all until you see that you are pregnant by the non-appearance of the next monthly.

5. **To obtain boys** use only 5th, 6th, 7th days after the 5 days of the period and no others at all until you see by the non-appearance of the next monthly that you are pregnant.

6. **For no results** as to children, but for health's sake, use only 11th, 12th, 13th days after the 5 days of the period. This is quite sufficient for happy married life, it should not be frequent as it enervates both men and women and is not prized as it should be as a sacred act of love. It should never become a mere habit, that is disastrous as to spirituality in parents and children. It should be an "act of love for the help of both man and wife," and no manly man will cause the wife pain, unless they both concert in the supreme act of having children and there should be a time chosen for this act.

These divisions of time are not of my making but fall into their place in the study

of the laws of fertilization, which opens out a great field of interest to women because there is not anything in life which makes for so much personal happiness as the power of creation, and the greatest thing which can be created in a man. It lies in woman's power to-day, with proper knowledge, to produce the super-man, and daughters to follow in their mother's steps who shall hold it the greatest work of women to forward the march of the race."

Question might arise as to how the above divisions of time will hold if menstruation does not recur at regular intervals of 28 days. And the plain answer is that, even if menstruation occurs at other intervals or is irregular, it does not affect, in any way, our method of sex determination. If you are desirous of having a boy, all you have to do is to avoid sexual unions for nine days after the commencement of menses and that solves the whole problem according to this theory, no matter whether your wife is having her periods at intervals of 28 days, 30 days, 21 days or irregularly.

THEORY THE FOURTH

Dawson's Ovular Theory.

It was an ancient belief that the union of the secretions of the right testicle and right ovary resulted in a male issue and that of the left testicle and left ovary produced females. If this theory were true it would not be in the power of man to control the sex of his progeny unless he got rid of one of his testicles and one of the ovaries of his wife. But this belief is still held by a majority of persons.

It was possibly on the strength of this old theory that, in 1909, E. Rumley Dawson proclaimed his new theory of sex determination discussed in a book entitled. "The Causation of Sex." Rumley maintains that man has nothing to do with the determination of the sex of his offspring ; that it is entirely the ovum that confers the sex ; that the ovum derived from the right ovary is essentially male and that derived from the left is female, and it is the impregnation of

the right or the left ovum which results in the male or the female child.

After proving at length that the two ovaries function alternately, each discharging only one ovum usually in alternate months, Rumley Dawson quotes his theory as follows :

" This, then, is my theory, that the sex of the foetus is *not* due to the male parent, but depends on which ovary supplied the ovum which was fertilised, and so became that foetus.

I find that a male foetus is due to the fertilisation of an ovum that came from the right ovary, and a female foetus is due to the fertilisation of an ovum that came from the left ovary.

I will explain the theory more in detail.

FIRST, then, my theory maintains that the male parent or father has *no* influence in causation of sex, which rests entirely with the female or woman. She has in her two ovaries the already definitely sexed ova ready only for the fertilising action of the male semen, so that though

man or the male fertilises the ripened ovum, he does not (to coin a word) *sexify* it or cause its sex.

No theory which I can discover has hitherto entirely dissociated the male parent, as I do; hence it is entitled to be called a new theory.

Every theory in which the father is credited with being even partly responsible for sex causation differs materially from mine.

SECONDLY, my theory maintains that male ova are restricted to and come only from the right ovaries, and female ova only from the left ovary.

It matters not from which testicle the spermatozoon is derived which fertilises the ovum, the essential point being that sex is due to the ova always having their definite and unalterable sex prior even to ovulation.

It follows that directly an ovum is fertilised, a boy or a girl has begun to be developed, and external or other influences brought to bear on the mother cannot alter the sex of the future child.

To inquire why the ovary of the right

side should have been chosen for the production of boys rather than the other side seems as fruitless and as useless as to inquire why the liver should have been placed to the right and the spleen to the left of the body.

Galen said it was due to the right side being warmer than the left, but how this can rank as cause and effect I know not.

It is, however, reasonable to suppose that the association of the left ovary with the production of the female sex is due to the fact that the muscularly weaker sex should arise from the muscularly weaker side of the body.

That the left side of the body is the weaker of the two is manifestly true, for as *Herman* says :

"The left side is weaker than the right, not only in muscular strength, but in power of resistance to painful impressions. This is illustrated by the fact that in cancer, which has no preference for the left side rather than the right, pain is common on the left side. So it is in displacements of the uterus, although the changes in this condition

have no unilateral character; and in the pain down the thighs from hæmorrhoids."

"So that the muscularly weaker sex are derived from the ovary of the left or weaker side, while the larger and stronger males come from the larger right ovary."

As to whether the male parent influences the sex of the coming child in any way, Dawson writes decisively:—

"It will come as a serious blow to the vanity of man to know that this question must be answered with a decided negative.

Man, or the male, has nothing to do with the causation of the sex of the future child."

In the act of insemination, the semen comes *via* the ejaculatory ducts from both testicles simultaneously, and from the reservoirs or vesiculæ seminales which store the secretion from both the testicles. Out of this mixture of spermatozoa from the two testicles some chance spermatozoon fertilises the carefully prepared and sexually distinct ovum derived from a single ovary. Which spermatozoon from the number which collect around an ovum ac-

tually does fertilise the single ovum nucleus must be purely a matter of chance, but man's part in fertilisation and generation has ceased with the supplying of this single chance spermatozoon. Can we credit, then, that this sperm-cell, rapidly formed in the testis, can be the instrument chosen from among hundreds of thousands of others to determine the sex of the future child?

Its life-history is so short, and its successful junction with the ovum so much a matter of chance, that it compares very unfavourably with the ovum, which though truly only a single cell, has enjoyed almost a monopoly in the maternal production.

This ovum which was present in its mother's ovary prior even to her own birth, has been carefully preserved for some twenty-five years, if the woman is of that age; and for some months has been an object of careful preparation and maturation; it is therefore no chance production. It carries with it, I say, its definite unalterable sex, and awaits only fertilisation.

That the human ova have their sex

already definitely fixed prior even to their dehiscence, I stated in my paper in the Obstetrical Society's "Transactions" for 1900, vol. xlii page 356. The male ova arise from the right ovary and the female from the left ovary, so that the female infant is born with her primitive ova already either male or female, and thus the causation of sex comes to be dependent on the woman alone.

I have already said the causation of sex is dependent on the woman alone; it comes to be essentially her prerogative. She prepares an ovum (male or female) in much the same way as a parlour-maid prepares and lays a fire—it may be a coal or a wood one—and waits for the match to be applied before the fire develops. The application of the match to the fire in the grate, whether it is wood or coal, starts the fire—it does not make a coal fire into a wood one or *vice versa*; and in a similar manner the penetration of the spermatozoon into the prepared ovum starts the process of development of a child, a boy or girl being produced according to which ovary prepar-

ed the ovum. Hence the part played by man is that of applying the match or stimulus which starts the process of development and growth of the offspring from the ovum. Man in fact, is the fire-lighter, not the fire-layer. Man fertilises the ovum.

The plan of producing boy or girl at will according to the theory of Rumley Dawson is as follows :

(1) Keep an exact record of the occurrence of monthly periods and note the interval at which the periods recur. Usually the 28 day type is to be met with but the 21-day, 25-day or 30-day types are not uncommon. If, however, the woman is quite irregular and no two periods occur at equal intervals, it is difficult to get results in her case.

(2) You can determine the sex of your future children only after the birth of the first one.

(3) All you have to do is to go back 280 days from the date of birth of your first child. This tells you the time at which one out of the two ovaries has produced an

ovum.

As the ovaries function alternately at fixed intervals, you can calculate when the right or the left ovary will shed an ovum. If you want a boy avoid sexual intercourse in those months in which the left ovary is known to function and reversely. To make the process the more clear I will illustrate it with a concrete example :

Mrs. X has her period usually regularly at intervals of 28 days. She gives birth to a daughter on the 16th of January, 1929. Both she and her husband wish that their next child should be a boy. To secure this end they should proceed as follows :

Counting back 280 days from January 16, 1929, we arrive at April 10, 1928. This is the day on which Mrs. X was most probably impregnated. Find out from the diary the exact day of the commencement of menses immediately preceding the 10th of April. Supposing it is the 4th of April, 1928, the ovulation in Mrs. X on this date has occurred from the left ovary since she produced a *girl* as the result of her impregnation on

subsequent date within that month. As the periods occur in her at fixed intervals of 28 days it is easy to calculate when she would have male or female ovum in her uterus, for instance, on the 2nd May, 1928 (*i. e.* 28 days after the 4th April of that year) she would have a male ovum, and on 30th of May a female ovum, and so on subsequently; and as each ovum usually has its existence in the uterus for 16 days, the husband knows when to avoid them according to the sex of the child desired.

(4) The calculations given in (3) are to be made continuously even if menstrual periods be absent in consequence of pregnancy or lactation.

(5) Had Mrs. X been getting her periods at intervals of 21 days or 30 days, the divisions of time would then be made according to these intervals and not 28-days intervals.

MISCELLANEOUS THEORIES.

Besides the four main theories mentioned in the preceding pages, there are quite a number of other minor theories of sex determination and, for the sake of interest, these may be mentioned before we pass on to our final consideration.

1. The secretion of the right testicle plus that from the right ovary together produce boys and reversely. *Anaxagoras* and *J. Henke*.

2. Turning by the woman on to her right side after coition to ensure semen falling into the right side of uterus, produces boys and *vice versa*. *Avicenna*.

3. Sex is determined by the relative prevalence of the male or female semen, either as to the quantity of it, or else the relative strength of it.

4. Habitually sleeping by the wife on the right side produces boys.

5. If coitus is had at a time when breath in the male is flowing through the right nostril and that in the woman through

the left nostril and impregnation takes place, it will result in a male issue and reversely. *Ayurveda.*

6. There are two phases of the moon each of a fortnight's duration i.e. the bright fortnight and the dark fortnight. If impregnation occurs at any time during the dark fortnight, it will be a male conception; if during the bright fortnight, a female conception.

7. If the husband is older than the wife, more boys are born than girls. If husband and wife are the same age, somewhat fewer boys are born than girls.

If the wife is older than the husband the excess of female births is still larger.

Hofacker and Sadler.

8. Women who give birth to a first child comparatively late in life usually produce boys. *Hacker.*

9. If the husband is at least ten years older than the wife, and the latter is at an age when her reproductive capacity is at its maximum, the offspring exhibit a notable excess of male births. On the other

hand, fewer boys are born than girls as the offspring of marriages in which, although the husband is older than the wife, the wife has not yet attained the age of maximum reproductive capacity. The excess of female births is most marked when the husband and wife are of the same age. When the wife is older than the husband there is a moderate excess of male births. *Kisch.*

10. Sex is influenced by the phase of the *tide* at a given latitude. When conception occurs during the six hours when the tide is coming in, it will be a male conception, and if during the six hours when the tide is going out, it will be a female conception. *Reed.*

The longer the interval between one parturition and the next, the greater is the excess of male births. *Dusing.*

11. The determination of the sex of the embryo depends neither upon the quality of the ovum nor upon that of the spermatozoon nor again upon the reciprocal influence exerted by ovum and spermatozoon

on one another. During the earliest times after fertilization the embryo is sexually neutral and later, as a result of some new influence acting upon it, does it receive an impulse toward the formation either of the male or of the female sex.

Among all the external conditions which are capable during this period of exercising a determinative influence, the most important are the nutritive conditions, for nutrition is the most important factor in determining the form of the young animal and most of the other outward conditions, such as light, heat and chemical changes, effect the embryo in an indirect manner only, through the changes they are respectively capable of inducing in its nutrition and metabolism. *Ploss.*

12. In times of famine, pestilence and war when the food supply is much less than the demand for it, the percentage of male birth rises appreciably. In other words malnutrition of the parents is a factor in the causation of male offspring. Therefore,

when a boy is desired, fasting by one or both parents may be helpful.

13. *The Chromosomes.* If an ovum or a spermatozoon be seen under a powerful microscope, it would reveal the presence of a definite number of tiny coloured granules. These are called the *Chromosomes*. When the two cells unite, the chromosomes divide and pass on to the two opposite ends. But when this dividing process is complete there remain in the centre one or more chromosomes which present a different appearance from the rest. These accessory chromosomes are supposed to be sex determinants but the exact manner in which they confer the male or the female sex to the coming child is not yet known. But even if this is known, it will not suggest any means of controlling the sex of offspring. It will simply disclose the fact that the question of sex determination is in the hands of Nature.

HOW YOU SHOULD PROCEED.

The question now arises as to how one should proceed in the matter of sex determination so as to avoid all possible risk of a failure. The importance of this question can hardly be over-estimated, for the question of having a boy or another daughter is so acute in some families that a failure to achieve the desired result would be nothing sort of tragic.

So the best thing to do is not to cling to one theory alone but to combine a number of such theories as have received support from scientific men and have given good results. I suggest the following procedure:

(1) If the periods in your wife are regular you can have no difficulty in finding out the months in which she has a male ovum in her womb. Hold sexual unions with your wife only in these months. In other^{al} months, either abstain altogether or have recourse to some reliable contracep-

tive. Sex Control should go side by side with Birth Control.

(2) Seek your wife nine days after the commencement of menstruation. The tenth and the twelfth day are the best for the purpose.

(3) The wife should be fully prepared for this meeting. She should be made to think that the coming union is going to materialize her hopes of getting a son. This should make her happy and seek her husband with an ardent desire for sex exercise.

(4) If, on this particular day, the husband observes a fast, while the wife takes nourishing diet, it may help matters still further.

(5) The wife should lie to the left side of the husband so that, when the two have been lying face to face for some time, the breath may automatically flow through the right nostril in the man and through the left nostril in the woman.

(6) After the act the wife should not get up from her bed but should turn to her right side and continue lying in that position as long as she can do so without any discomfort.

(7) A diary should be kept of all occurrences in the field of sex so that it may guide you in your future action and help you to arrive at definite conclusions as to the truth or falsity of any particular theory of sex determination.



And J

2.2.70

